from their competitors. If Professor Hall is right about capacity restraints removing the incentive for LECs to discriminate in favor of their cellular affiliates, one would not expect wireline-affiliated cellular companies to make large expenditures to market their services or to recruit new customers, but cellular services have been continuously and heavily marketed. Clearly then, the cellular experience is unequivocal evidence that regulation and safeguards are sufficient to allow BOCs to participate in markets where they also supply an essential input.

- 18. As I pointed out in my initial affidavit, we only need to look at markets that are currently vertically-integrated in order to see whether regulators will be effective in enforcing cooperation where it is necessary. In the IntraLATA toll market, where, in Professor Baumol's words, the IXCs did have the ability to "vote with their feet," IXCs have competed vigorously in some states since soon after the AT&T Divestiture. Professor Hall even notes that there have been benefits to consumers from competition in intraLATA toll (par. 154), which is good evidence that regulation is effective in protecting competition when one company controls an essential input. For example, Pacific Bell in California has lost a significant amount of intraLATA market share to competitors. Briefly summarized, the facts of intraLATA toll markets are:
  - BOCs participate without separate affiliates and without some of the specific safeguards prescribed in the Act for BOC interLATA services;
  - IXCs over the years have made an affirmative choice to compete with BOCs under these conditions and have done so successfully; and
  - competition in these markets has provided consumers benefits.
- 19. Given these facts, how can the incumbent IXCs believe that they cannot fairly compete against BOCs in interLATA markets where BOCs will start with zero market share and will operate under fairly severe regulatory restrictions? IXCs have competed willingly and

<sup>&</sup>lt;sup>4</sup> Rebuttal Testimony of Kenneth Gordon, <u>In the matter of the Joint Application of Pacific Telesis Group and SBC Comm</u>unications Inc. for SBC to Control Pacific Bell, Application No. 96-04-038, filed October 15, 1996, p. 6.



successfully in intraLATA toll markets under conditions much less favorable to them (e.g., no dialing parity, no BOC separate affiliate requirement, large BOC initial market share) than will exist in the coming interLATA market, so the Commission can be fairly certain that participation by BOCs in the interLATA market under the terms of the Act will not harm competition.

#### C. Price Cap Regulation Does Prevent Cost-Shifting

20. Both Professors Hall and Baumol take me (and, by extension, the FCC, since it came to the same conclusion) to task for suggesting that pure (no earnings sharing) price cap regulation eliminates the possibility or incentive for the LEC to misallocate costs and thus cross-subsidize competitive services. It is certainly true that price cap regulation does not entirely eliminate the possibility that a regulated company's rates will not some day be evaluated according to traditional rate-of-return standards. However, the remote possibility that there may be a rate base evaluation at some indeterminate point of time of the company's earnings does not provide a firm foundation for the price cap regulated company to purposefully misallocate costs for anticompetitive intent. In order for a price cap regulated company to take such a risk, it would have to be fairly certain that it will be basing its rates at some point in the near future on traditional fully distributed cost standards. The uncertainty of price cap regulation flows both ways: if, as Professors Baumol and Hall suggest, price cap regulation cannot be counted on to eliminate the risk of cross-subsidy, then the removal of price cap regulation cannot be counted on by the BOC as a foundation for misallocating costs for purposes of achieving a cross-subsidy. The relevant question is not whether price cap regulation represents an inviolable break from cost-based regulation, but whether the likelihood of a return to cost-based regulation is strong enough for a price cap regulated company to engage in an anticompetitive misallocation of costs. I submit that the answer to the latter question is no.



## D. Ability of Regulators to Use Regulatory Safeguards

- 21. Professor Hall uses a curious logical construct in arguing that regulators will be ineffective in using regulatory safeguards to prevent anticompetitive actions. He criticizes me and my colleagues, Professor Kahn and Dr. Tardiff, for not mentioning that regulatory safeguards were developed in response to concerns about AT&T interfering with competition before divestiture and subsequent actions by local carriers. Even if one accepts his claims about prior experiences at face value, why should that mean that tools developed after-the-fact to deal with such problems should not be relied upon? Regulators since divestiture have developed a number of regulatory safeguards and the skills to use them to protect competition. We should now use these tools for their intended purpose, not throw them away on the grounds that there were past problems that created a need for these tools.
- 22. Regulators do have the tools and the ability to protect competition. Repeating stories about what AT&T was able to get away with before divestiture to deter competition does not tell us anything useful about the abilities of regulators in 1997 to protect competition in a market where one company also provides an essential input. Attendance at one meeting of the National Association of Utility Commissioners would be enough for anyone to see that regulators' focus has changed over the years to the development and implementation of effective methods for regulating companies who compete in one market while they retain market power in an upstream market.
- 23. Regulatory skills for protecting competition were developed originally for use in the telecommunications industry, but they have even come to be used for regulation in the natural gas and electricity industries. For example, the Federal Energy Regulatory Commission (FERC) recently considered how best to promote competition in wholesale electricity generation markets, when utilities provide bottleneck transmission and distribution services as well as potentially-competitive generation.<sup>5</sup> The FERC decided that it would require

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Consulting Economists

<sup>&</sup>lt;sup>5</sup> FERC Order 888.

"functional unbundling" (as opposed to "corporate unbundling," such as the AT&T Divestiture) in order to ensure that all wholesale electricity generators would have access to the utilities' transmission and distribution systems on non-discriminatory terms. Functional unbundling allows the vertically-integrated utilities to operate in the competitive wholesale generation market, as long as access to their bottleneck transmission and distribution facilities is offered on an open and non-discriminatory basis. In order to protect competition in the wholesale generation market, the FERC developed regulatory safeguards that are very similar to those developed by Congress and the Commission to protect competition in the interLATA market. It is worth noting also that transmission and distribution are assumed to be natural monopolies in the electric industry, so FERC's regulatory safeguards will not be supplemented by the market power-dampening effects of potential competition, as they will be in the local exchange and access market for telecommunications. Nonetheless, just as the Commission found its regulatory safeguards to be sufficient to prevent discrimination and anticompetitive misallocation of costs in telecommunications, the FERC similarly concluded for wholesale electricity:

We believe that functional unbundling, coupled with these safeguards, is a reasonable and workable means of assuring that non-discriminatory open access transmission occurs. In the absence of evidence that functional unbundling will not work, we are not prepared to adopt a more intrusive and potentially more costly mechanism – corporate unbundling – at this time. FERC Order 888, p. 50.

#### VI. SUMMARY

24. The Commission and state regulators have been working hard to put in place the open entry conditions required in the Act for the local exchange market and to supplement their existing regulatory safeguards to prepare for increased competition in the interLATA market. It is time now to put these efforts to good use and to continue to realize the promise of the Act by extending the principles of the free marketplace to the current interLATA market. The Commission, the FERC, and the Congress all have concluded that regulatory safeguards are sufficient for regulators to protect competition in downstream markets even when one company



also has market power in an upstream market. Add to these regulatory safeguards the effects of potential competition produced by open entry conditions, and you have the Act's "belt and suspenders," which will do more than an adequate job of protecting competition in both the local exchange and interLATA markets in Oklahoma. Oklahoma consumers deserve to have a free choice to decide which company they want to patronize for long-distance services, so Southwestern Bell's application should be approved.



Thelen

KENNETH GORDON

Subscribed and sworn before me this 20th day of May 1997.

Notary Public

My commission expires: Sur Lawrey [8, 2003



# BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

In the matter of	)	
	)	
Application of SBC Communications Inc.,	)	
Southwestern Bell Telephone Company,	)	CC Docket No. 97-121
and Southwestern Bell Communications	)	
Services, Inc., for Provisions of In-Region.	)	
InterLATA Services in Oklahoma	)	

# REPLY AFFIDAVIT OF ALFRED E. KAHN AND TIMOTHY J. TARDIFF

Alfred E. Kahn and Timothy J. Tardiff, being duly sworn, depose and say:

#### I. INTRODUCTION

- 1. My name is Alfred E. Kahn. I previously submitted an affidavit (with Timothy J. Tardiff) in support of Southwestern Bell's application to provide in-region interLATA services in Oklahoma.
- 2. My name is Timothy J. Tardiff. I previously submitted an affidavit (with Alfred E. Kahn) in support of Southwestern Bell's application to provide in-region interLATA services in Oklahoma.
- 3. Southwestern Bell has asked us to respond to the economic and factual arguments made by experts representing parties opposing the application. These experts include Professors William J. Baumol, R. Glenn Hubbard and William H. Lehr, on behalf of AT&T, Robert E. Hall, on behalf of MCI, and Carl Shapiro and Ms. Marybeth M. Banks, on behalf of Sprint. Although these economists support ultimate reliance on competitive market forces rather than

direct economic regulation in telecommunications, as do we, they have a much different view than we of how best to reach that goal. In addition, Southwestern has asked us to evaluate the affidavit of May 14, 1997, of Professor Marius Schwartz, prepared for the Antitrust Division of the Department of Justice.

- 4. In our opening affidavit, we contended that
  - InterLATA long distance markets have not been sufficiently competitive; specifically, small users have not received the lower prices that truly effective competition would have been expected to bring them.
  - Entry by Southwestern Bell would be likely to substantially remedy that deficiency.
  - Although Southwestern Bell will supply some essential inputs to long-distance competitors, sufficient regulatory safeguards are in place to permit efficient competition in both markets. The efficacy of existing and new safeguards is richly illustrated by the post-divestiture history of vertically integrated ILECs competing in wireless, intraLATA toll, voice messaging and other markets with rivals that are dependent upon them for access to essential facilities under their control.
  - Therefore, consumers will benefit and the public interest will be served by Southwestern's entry into in-region long-distance.
- 5. The common threads in the arguments of the opposing witnesses are:
  - InterLATA toll markets are sufficiently, if not fiercely, competitive. Therefore, new entry in general, and ILEC entry in particular, will yield only marginal consumer benefits.
  - If permitted to offer interLATA service, the ILECs would have strong incentives to exercise their control over essential inputs and, because of the absence of sufficient competition at the local level, the ability to handicap equally or more efficient competitors; and regulation would be powerless to prevent such abuses.
  - While they rarely say this baldly, it is an essential part of their argument that the net result would be an *impairment* of *competition* as an effective protector of the public interest.

• Southwestern's entry at this time would therefore be injurious to the public; the present barrier to its entry should be removed only when and as local exchange markets become effectively competitive.<sup>1</sup>

#### 6. A careful evaluation of these contentions reveals that

- These conclusions are not supported by the facts offered in their support.
- Some of the proffered factual supports are either incorrect or misleading.
- In important respects the arguments are contradictory of one another or of positions taken by the witnesses or their clients in previous proceedings.
- The almost hysterical predictions of the incompetence of regulators to prevent or remedy the abuses of power that they widely predict directly contradict arguments made by some of these witnesses or their clients in other proceedings; betray a total ignorance of or misinterpret the rich experience that we cited in our original submission of successful competition between vertically integrated RBOCs and rivals dependent upon their essential facilities; perversely convert anticipated economies of scope available to the ILECs into sources of unfair competitive advantage by ignoring equally powerful economies of scope available to their rivals; and thereby fail to appreciate the importance of such economies, available to all likely market participants, as a source of powerful, efficient competition.
- They fail completely and systematically to confront the critical economic question
  of whether there is any likelihood at all that the RBOCs, if permitted to offer
  interLATA service, could indeed succeed in suppressing competition in that market
  or even weakening it as an effective protective force, thereby exposing consumers
  not to the salutary intensification of competition that we predict but, instead, to
  monopolistic exploitation.
- A disinterested observer cannot escape interpreting the intensity of the opposition of the incumbents to the Southwestern application, while declining explicitly to claim that the effect of granting it would actually be to weaken *competition*, as providing the strongest possible support for the proposition that the central thrust of their arguments is to protect their clients from—and deny consumers the benefits of—the intensified competition that removal of the barrier would permit.

None of the opposing affidavits provide any guidance for regulators in determining when local exchange markets are or will be sufficiently competitive. Indeed, some of them seem to believe that these markets may be natural monopolies (e.g., Baumol, par. 26), which would presumably permanently preclude ILEC entry in their view.

## II. INTERLATA LONG-DISTANCE COMPETITION

#### A. What has happened to prices?

7. The primary factual issue in the differing assessments of the strength of competition in the long-distance market is how far prices have dropped in relation to costs, particularly for smaller users. Professors Hubbard and Lehr. Professor Hall and Ms. Banks all claim prices have declined more than access charges, both on average and for the smallest users. For a number of reasons, the evidence they offer fails to undermine our conclusion that smaller users have not benefited as much as they would have had competition been truly effective. Indeed, our conclusion is supported by the affidavit of Professor Marius Schwartz, filed on behalf of the DOJ, in his discussion of the significant efficiency advantages a BOC would bring to the long distance market. He states specifically that "A BOC would be especially well placed to address lower-volume customers." (Schwartz, p. 33, par. 96)

#### 1. Professor Hall's price series are highly dubious.

- 8. The measures of prices and of the concurrent changes in access prices over the period 1985 to 1996 presented by Professor Hall are of dubious validity, for the following reasons.
  - For the critical period of 1992 to 1996, his retail price data are based entirely on proprietary information that has not been offered for validation in this proceeding.
  - The access price series is constructed in such a way as to *understate* the reduction since 1985 and therefore overstates the extent to which those reductions have been passed through in retail prices.
  - The retail prices he quotes for the beginning point are considerably higher than have been provided by other authorities; the result is to give the appearance of greater reductions over the entire period than flow from these other data.
  - Average revenue per minute is not the same as price and can change—and has changed—while prices remain unchanged.

We consider each of these criticisms, in turn.

- 9. Since we cannot check Professor Hall's data for 1992-1996 directly, all we can do is refer back to the data in our original submission and, reemphasizing our principal point that the full benefit of access charge reductions during those years were not passed on to small residential customers, point out that a recent study by FCC economists shows that while prices net of access charges fell for larger customers, net prices actually increased by 17 percent between 1991 and 1996 for customers making 50 minutes of calls per month.<sup>2</sup> Of course, customers with less than 50 minutes per month experienced even greater increases in both price and price net of access charges.
- 10. There are two apparent errors in Professor Hall's calculation of access charges. First, because his reported 1996 charge in 1996 dollars (real price) is lower than when he states it in current dollars, it appears that his real prices may have not been calculated properly. Second, he applies the 55 percent discount for non-premium access to the entire premium access charge rather than to only the carrier common line charge.<sup>3</sup> The effect of this error is to underestimate nominal carrier access charges over the entire period, but more in the early than in the later years, and therefore to underestimate their *decline*.<sup>4</sup> Correcting these errors increases the real

<sup>&</sup>lt;sup>2</sup> J. Duvall, D. Fertig and G. Ford, "Market Performance in the Long Distance Telecommunications Industry: The AT&T Non-Dominance Petition," May 8, 1996.

The switched access charge includes traffic sensitive and non-traffic sensitive components. The interstate rates provided a 55 percent discount on only the non-traffic sensitive component (the carrier common line charge). Professor Hall's Table B-1 shows a total charge per conversation minute of 17.3 cents in 1985. The CCLC accounts for about 10.5 cents of this total (5.24 cents on each end of a call). The 55 percent discount applied to the 10.5 cents, not the full 17.3 cents. Thus, the nonpremium rate was about 5.8 cents lower than the premium rate, not the 9.5 cents calculated by Professor Hall.

This is so for two reasons. The first is that the charges were higher at the beginning than the end, so Professor Hall's application of the same percentage discount incorrectly to the entire charge took more cents per minute off the former than the latter. The second reason is that there were far more premium minutes in 1985 than (continued...)

access price reported by Professor Hall by a full 20 percent (from 18.4 to 22.1 cents) for 1985 and only from 5.8 to 6.7 cents for the terminal year.

11. Professor Hall lists a real toll price (actually, average revenue per minute—ARPM) of 51.5 cents for 1985, which translates into a nominal price of 37 cents. In contrast, Dr. Gerald Brock, of the FCC, estimated AT&T's average price (on the same basis) at only 31 cents in 1984,5 which, carried forward to 1985 by the percentage change in the CPI for toll calling, reduces to 30 cents in the latter year, or about 20 percent below Professor Hall's figure. Moreover, since the prices of the other IXCs were lower than AT&T's in those early years—partly because AT&T served a larger mix of small customers—the industry-average price should have been somewhat lower than AT&T's—rendering Professor Hall's 1985 price of 37 cents even more dubious. The effect is of course that his figures show a much larger decline in prices since 1985 than would flow from the Brock estimate of the beginning point.

12. Correcting for the underestimate by Professor Hall of the decline in access charges and his apparent overestimate of the decline in retail toll prices that we have identified produces a considerably smaller estimate of the reduction in prices net of access charges. His table on page 12 shows the real net price declining from 33.2 cents in 1985 to 8.7 cents in 1996. The corresponding change in nominal (current dollar) prices is from 23.8 to 8.7 cents. The

(...continued)

<sup>1996,</sup> by which time equal access had become almost universally available. Professor Hall's access price is a weighted (by minutes) average of the premium and nonpremium rates. Therefore, as the share of nonpremium minutes declined, the effect of the discount eroded. By the early 1990s the nonpremium share of minutes was close to zero. Since Professor Hall's calculations exaggerate the absolute importance of the discounts more at the beginning than at the end of the period for both these reasons, they understate the decline in the average price.

<sup>&</sup>lt;sup>5</sup> Gerald W. Brock, "Bypass of the Local Exchange: A Quantitative Assessment," Federal Communications Commission, OPP Working Paper Series 12, September 1984.

corrected real decline would be from 19.8 cents in 1985 to 7.8 cents in 1996—only half as large—and the nominal change from 14.2 to 7.8 cents—considerably less than half. We emphasize that our purpose here is not to offer corrected versions of Professor Hall's data—which are subject to one additional fundamental criticism that we proceed at once to explain—but only to demonstrate that his own figures contain or apparently contain errors apparently large enough to call their reliability into question. This is so entirely apart from the fact that the post-1992 data are not disclosed in his affidavit and cannot therefore be subject to timely validation.

- 13. As we have already pointed out, Professor Hall's "prices" are in fact average revenues per minute (ARPM). But the decline in ARPM over the last several years almost certainly overstates the actual decline in prices, as the few following examples demonstrate:
  - Suppose AT&T customers demand ten minutes of message toll service (MTS) for each minute of wide area toll service (WATS) (and no other services) and that the price of MTS (per minute) is twice that of WATS. If MTS and WATS prices increase by 1 percent but demand for WATS grows at 50 percent per year while MTS demand grows at 10 percent per year, then the ARPM of usage decreases by about one half a percent. In other words, ARPM declines despite the fact that both of the component usage prices have increased.
  - A similar problem arises in the presence of volume discount plans. Suppose the prices in the plan remain fixed, but customers are able to receive lower effective marginal prices when their demand expands (e.g., because they have installed fax machines). In that case, ARPM would decline not because the price of usage declined but because customer demand increased. In fact, in this example, ARPM could decline even when the prices for low and high volume users increase if volume growth is sufficiently large. For example, suppose that at the starting point the price schedule for an average user is 20 cents for the first 100 minutes and 15 cents per minute thereafter; that those two price brackets are increased to 21 cents and 16 cents respectively, but that the usage of the average customer grows from 150 to 250 minutes. In those circumstances, the ARPM would have been 18.33 cents per minute before the price increase and 18.0 cents afterward.
  - ARPM will also overstate the effect of a price change if the own-price elasticities for different services are different, even when the percentage price change for each is

identical. For example, suppose (1) the price of service A is one dollar per minute, ten minutes are sold, and the A own-price elasticity is -0.2, and (2) service B has a price of 50 cents per minute, a demand of ten minutes and an own-price elasticity of -5.0. If the price of each of the services decreases by 10 percent, ARPM will decrease by 17 percent. Observe that the anomalous result is not caused by substitution of lower-priced service—their demands are assumed to be independent in this example—but reflects the inadequacies of the index itself.

- ARPM (as measured by the IXCs) goes down when facilities bypass is initiated by the end user, but this decline will overstate the effective reduction in price or cost savings enjoyed by the customer. For example, when a large customer builds a private network bypassing LEC access facilities, AT&T's ARPM from that customer could go down (relative to its MTS rates, which include the carrier access charge) but the cost per minute to the customer would have to reflect both AT&T charges (ARPM from AT&T's perspective) and its own network costs.
- 14. These examples illustrate two general tendencies for ARPM to exaggerate recent price reductions. First, when different prices are charged to different customer groups or for different services, differences in the rates of growth of their sales (whether or not caused by the change in prices) can cause aggregate ARPM to overstate price reductions. Second, ARPM from any one IXC will misstate end user costs when end users assemble services through a variety of vendors.<sup>6</sup>
- 15. Professor Hall says that his analysis of confidential MCI information demonstrates that his ARPM data are not distorted by changes in the mix of customers. Lacking access to those data, all we can observe is that we find it unlikely to be true. We point out, for example, that AT&T has itself specifically called attention to precisely the kind of distorting effect of

<sup>&</sup>lt;sup>6</sup> Changes in average access cost per minute (AAPM)—reflecting changes in payments to LECs—will likewise exaggerate the reductions in access costs that IXCs or their customers have actually realized when they bypass LEC facilities. The tendency that we have described for ARPM to overstate price reductions is therefore offset to some extent by the similar tendency for AAPM to overstate reductions in access charges. At most the errors cancel one another. What is far more likely is that average revenue per minute net of access overstates the actual reduction in prices or costs borne by customers: ARPM is likely to err by more than AAPM, because in every situation where AAPM is biased downward (i.e., when LEC access is bypassed) so is ARPM, and there are a variety of other situations in which only ARPM is biased downward.

changing service mixes that we have hypothesized.<sup>7</sup> Moreover, Professor Hall does not show any recognition of the other kinds of distortions inherent in the ARPM figures that we have identified.

# 2. Hubbard and Lehr's analysis does not even purport to be of the prices subscribers have actually paid.

16. Professors Hubbard and Lehr's proffered refutation of our major contention, that small users have not only received far smaller price reductions since 1984 than large customers but have not even received the full benefit of the decline in carrier access charges, suffers from the fundamental deficiency of not examining the prices or average prices that these customers have actually paid. Contrary to their own recommendation that attention be focused on actual revenues per minute, they use the "best offer price" in breaking out the price changes experienced by users of particular sizes. Manifestly that "best offer price" is not going to be the same as the average price that subscribers actually paid. Since a majority of AT&T's customers still use the undiscounted basic tariff, Hubbard's and Lehr's selective use of "best offer" prices obviously results in an understatement of the prices customers are actually paying. Their use of "best offer" prices is likely to produce a distorted picture of not only the level but also of the downward trend: it seems a reasonable supposition that the "best offers" have gotten more and more attractive relative to the basic tariffs over time, with the consequent effect of exaggerating the measured decrease in prices actually paid.

According to its 1994 Annual Report, "Although we raised prices on basic services over the past two years, the shift in the mix of services that customers selected reduced average per-minute revenues in 1994 and 1993" (p. 24).

17. This flaw becomes especially egregious after 1990, when their own data (Figure 5) show that customers in the \$5-\$10 range experienced price increases between that year and 1996.9 The only way they are able to show a price decrease thereafter is by constructing an artificial price of 15 cents per minute for 1997, because such customers "need pay no more" than this amount. And even their artificial 1997 price does no better than restore users in the \$5-\$10 category to the price that Figure 5 shows they were charged in 1990, despite the continued decline during this period in the access charge their suppliers paid.

18. Ms. Banks makes similar arguments on behalf of Sprint. Although her own Figure 1 shows that prices for offerings that were available throughout the period she examined increased steadily after 1992, she claims that prices have recently declined because of the introduction of new discount plans. It is clear, however, that (1) her conclusion depends on what proportion of customers have actually chosen these plans (she claims, without documentation, that a majority have actually done so; even if this assertion is correct, it clearly means that the average price will have been higher than the price available under the most attractive plan) and (2) the deep discounts are a recent phenomenon. introduced in 1996 or later. Thus, whatever may be said of the current competitiveness of the long distance market, Sprint, like AT&T, has in effect conceded that until 1996 or 1997 prices were not consistent with the kind of fierce competition that they claim prevails at the present time. Moreover, Ms. Banks

(...continued)

<sup>&</sup>lt;sup>8</sup> John J. Keller, "Reach Out and Grab a Good Phone Deal as AT&T's Unheralded Offer Shows the Best Discounts go to the Hardest Bargainers." *Chicago Tribune*, February 25, 1997. See also Professor Schmalensee's submission in this proceeding.

They do not even attempt to show what has happened to customers in the \$0-\$5 range, a group that has disproportionately experienced the undisputed increase in the basic tariff prices.

concedes that subscribers paying the basic rate (i.e., small users), which she says are disproportionately served by AT&T, have not benefited. That is, Sprint's alleged price declines have not benefited most small users because it tends not to serve them.

19. The price data offered by the witnesses for AT&T and Sprint therefore confirm our conclusion that small users did not, in the prices they actually paid, receive the full benefit of the reductions in the access charges that their service providers were forced to pay the local telephone companies, let alone from any compression in those providers' margins above costs. AT&T's recent promise to the Consumer Federation of America and the FCC that it will pass through to small residential customers promised reductions in access charges—and the implied promise of the Commission to monitor its compliance—is itself in effect a concession to the previous complaints both of these agencies expressed before that time about the sufficiency of competitive pressures alone.

#### **B.** Profit Margins

- 20. Primarily in response to the criticism of FCC access pricing policies leveled by economists supporting AT&T, we pointed out that the margins (price minus incremental cost) recovered in its own interLATA long-distance rates were larger than the margins contained in the access charges it pays. Professors Hall, Hubbard and Lehr claim, in response, that long-distance margins contain no more than normal profits.
- 21. The accuracy of margin calculations depends of course on the accuracy of the estimates of the long-run incremental costs and of the prices from which they are derived. With respect to the first of these components, our opening affidavit acknowledged the uncertainty surrounding those estimates, particularly of such forward-looking non-network costs as

marketing. For this reason, we provided a range for those costs between the 1 to 2 cents a minute in the several published estimates we cited and the 5 cents a minute that Crandall and Waverman judged it probably would not exceed. Adding these to the carrier access charges of an estimated 6 cents produced our incremental cost range of 8 to 11 cents a minute, and this, subtracted from AT&T's 1994 price (as measured by ARPM) of 18 cents per minute (a figure not disputed by Professors Hubbard and Lehr), yielded our estimated margin of 7 to 10 cents—clearly substantially higher than the margin incorporated in the access charge itself.

- 22. Professor Hall suggests that a recent long-run incremental cost estimate by Crandall and Waverman of 11.4 to 12.4 cents, including the access charge, 10 contradicts our calculation.

  Crandall and Waverman describe their cost estimate as follows:
  - Even if Ameritech has to spend as much as AT&T on marketing, customer service, and overhead, its costs would be only 6.4 cents per minute to 7.4 cents per minute plus an imputed 5 cents per minute for access charges for a total of 11.4 cents to 12.4 cents per minute.
- 23. Clearly, some of these costs are average, rather than marginal in nature (e.g., overhead). Since average costs for this industry tend to exceed incremental cost, the Crandall and Waverman estimate does not contradict our range. Even their upper limit for costs produces a 5.6 cent markup, one just as large as is incorporated in the access charge.
- 24. Professors Hubbard and Lehr manage to estimate a margin incorporated in AT&T's charges that is narrower than the margin in the access charges by (1) extending the upper bound

Joint Affidavit of Robert Crandall and Leonard Waverman on behalf of Ameritech Michigan, <u>In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Michigan, CC Docket No. 97-137, Vol. 3.1, 5/21/97.</u>

of AT&T's estimated incremental costs, including access, to 14 cents and (2) by constructing the artificial price for 1997 which we have already described and refuted.

- 25. Of course, cost measurement in these markets is fraught with difficulty and contentiousness, with small absolute differences in estimated costs producing large differences in the estimated percentage markups. Moreover, there may well be large differences between the short run marginal costs that it might be sufficient for individual sales, to individual customers, to recover for the transactions to be profitable and the long-run incremental costs that companies would have to recover if they were to continue to provide service to large groups or the totality of their customers. There is probably a large difference also between the total long-run incremental cost of serving large business customers, on the one side, and residential, on the other. Even with all these qualifications, the prices at which sales are actually being made provide at least a suggestion of the upper bound of incremental costs. And this type of information tends to corroborate our upper bound of 11 cents per minute. For example, long distance carriers are offering intraLATA toll service for 8 cents per minute in California—a figure roughly equivalent to an interLATA price of 10 to 11 cents per minute. because in-state access charges in California are lower than the national average. AT&T offers in-state toll calls at 5 cents per minute in Connecticut.
- 26. There are two possible interpretations of these low prices of intraLATA offerings. One is that the IXCs' costs for these services may, in fact, be higher—as they almost certainly are in the Connecticut case—but the carrier is able to offer these prices profitably because it expects to bundle the intraLATA with compensatingly higher-margin interLATA offerings—thus confirming our basic point. Alternatively, the prices are compensatory in isolation, implying

that costs are no higher than they. Either interpretation supports our conclusion that the IXCs' prices contain healthy margins.

#### C. Entry

- 27. Professors Hall, Hubbard and Lehr pose a challenge: if profit margins are as lucrative as we (and others) claim, why aren't more IXCs entering and why haven't RBOCs used their new freedom under the Telecommunications Act to offer that service out-of-region?
- 28. The simple answer to this challenge is that *they are and they have*. Professors Hubbard and Lehr need look no farther than page 19 of their affidavit, where they report "...there are over 850 firms competing for long distance services a number that increases with each year." Their Figure 1 shows that the rate of entry has accelerated since 1992—the very period when basic rates were increasing.
- 29. As for RBOC entry out-of-region, we reported that SBC, NYNEX, Bell Atlantic, Ameritech, BellSouth and GTE have all entered into resale agreements with IXCs at very favorable prices to provide out-of-region services. Southwestern Bell, for example, now has had intrastate tariffs approved in six states (Illinois, Massachusetts, New Hampshire, New York, and Rhode Island) and has an application pending in West Virginia. Crandall and Waverman point out that these resale agreements are already having a salutary effect on wholesale prices charged by the major IXCs.
- 30. Of course, the vast majority of long-distance firms are resellers: it would obviously not be economic, particularly in view of the ample long-distance transport capacity already in being, for the RBOCs to enter those markets out-of-region on a facilities basis. On the significance of this kind of competition, the witnesses for the several intervenors are curiously

inconsistent. While Professors Hall. Hubbard and Lehr clearly view resellers as of great competitive significance when it comes to interLATA markets, they, along with Professors Baumol and Shapiro, almost totally discount the importance of resale (and use of ILECs' unbundled elements) when it applies to local services. In fact, the resale requirements for local exchange providers are considerably tougher than those imposed on IXCs. While the latter are merely required to make whatever bulk pricing plans they offer retail customers available also on a wholesale basis, at the same retail price, the ILECs must provide all retail services at regulatorily approved wholesale discounts. Yet, while in the view of these witnesses the former, more relaxed resale requirements were historically significant for long distance, the more stringent standards applicable to the LECs will supposedly be of little effectiveness in opening local exchange markets to competition.

31. In fact, in the early days of long-distance competition, when the newer IXCs, MCI and Sprint, had to resell AT&T's high-volume services to fill out their national networks, those wholesale inputs were every bit as essential as carrier access (and access to other essential services provided by ILECs) is today. Moreover, according to the logic of Professor Hall's, Hubbard's and Lehr's opposition to RBOC entry into the interLATA market today, AT&T would have had the same incentives to obstruct or prevent competition that the ILECs have today. And there were indeed complaints by AT&T's rivals of refusals on its part to accommodate them by permitting them to resell its long-distance services. The fact remains that, thanks in part to the resale obligations imposed on AT&T by its regulators, competitors have successfully entered the field, sharply reducing AT&T's own market share, without need for prohibition of AT&T's competing with them similar to the line-of-business restrictions on the BOCs.

## III. THE EFFICACY OF REGULATORY SAFEGUARDS

- 32. In response to our contentions and supporting evidence that existing safeguards are sufficient to ensure fair and efficient competition in both local exchange and long-distance markets, the other parties' economists have relied on a combination of hypothetical arguments and anecdotes of assertedly anticompetitive behavior. Because they offer only two perfunctory and irrelevant responses (as we will demonstrate presently) to our challenge to these kinds of "evidence" in our opening affidavit, we take the liberty of repeating that challenge here:
  - There has accumulated, over the last decade or more, a great deal of actual experience with competition between the RBOCs—and LECs that are not BOCs—on the one side, and rivals dependent on access to their facilities. An ounce of actual experience is surely weightier than a pound of speculation about possible misdeeds or, indeed, of anecdotal claims about exclusionary practices. Assertions about the theoretical inadequacies of regulatory safeguards against predation, cross-subsidy and discriminatory treatment of competitors simply ignore this historical evidence. In practice, competition by non-vertically integrated firms with RBOC 'bottleneck monopolies' has already succeeded in other telecommunications markets that are at least as susceptible to anti-competitive tactics as the interLATA market [that SWB now seeks to be permitted to enter]—geographic corridors in which the BOCs have been permitted to offer interLATA service, cellular, paging, voice messaging services (VMS), customer premises equipment (CPE), intraLATA long distance and the offer of long-distance service by LECs other than BOCs. (par. 51)

#### A. The safeguards have worked.

33. The rebuttal testimony essentially ignores this rich history of successful competition with vertically integrated local telephone companies. So far as we can tell, apart from their recital of hypothetical risks and specific incidents of claimed discriminatory or exclusionary practices, our critics offer only two perfunctory responses, both of them irrelevant. The first is that the competitive services we cite "are complementary to the LECs' core business" and generate additional demand for access (Hubbard and Lehr, pp. 77-78). This response is totally

irrational. InterLATA toll service is likewise complementary to the LECs' core business, in exactly the same way. The significant fact in all these cases is the one we cited—that the independent suppliers of these services compete directly with the LECs while continuing to be dependent upon them for essential inputs or interconnections, and the LECs would therefore have precisely the same incentives as well as power to discriminate against them in such a way as to impede their competition, in precisely the same way as these witnesses claim they will do if permitted to enter interLATA service.

- 34. The other proffered response, likewise irrelevant, is Professor Hall's dismissal of the record of successful cellular competition on the ground that only a finite amount of spectrum has been assigned to that service (pp. 41-42). This fact would be relevant if its effect were to limit the ability of the two certificated incumbent carriers to take on additional business, either individually or collectively. The fact is, however, that the expansion of cellular service has *not* been substantially capacity-constrained. On the contrary, the growth in subscribership has averaged over 40 percent annually, stimulated in important measure by competing promotional offerings by the wireline and wireless rivals. This fact further underlines the irrelevance of Professors Hubbard and Lehr's dismissal of these examples as involving complementary services. The rapid growth of this market, one would have thought, would have increased the incentives of the wireline LECs to engage in anticompetitive conduct aimed at taking it over.
- 35. International experience further undermines the rebuttal witnesses' dismissal of the regulatory safeguards as ineffective. While the United States was clearly the leader in opening long-distance markets to competition, it has been alone in requiring divestiture and quarantine. And yet, despite their having removed their barriers to entry into those markets well after the United States had done so and despite their having permitted the providers of essential local

exchange services to continue to offer the newly competitive services, toll competition has made substantial progress in other countries. For example, the incumbents in Canada have lost more market share since competition was authorized in 1992 than occurred in the United States over the comparable period after 1984. Similarly, three facilities-based carriers have captured over 30 percent of the Japanese long-distance market since 1987, despite the fact that the incumbent NTT remains vertically integrated.

# B. The hypothetical arguments of the opponents ignore both regulatory history and elementary competitive principles.

- 36. The rebuttal arguments of Professors Hall, Hubbard and Lehr, Baumol and Shapiro consist in very large measure of a listing of all the familiar hypothetical dangers of permitting vertical integration by putative monopolists under regulation: that permitting the BOCs to provide interLATA service will
  - create the danger of vertical squeezes on competitors;
  - invite the ILECs to transfer inputs to their competitive operations and engage in other such transactions among affiliates at non-compensatory prices, to the unfair disadvantage of their competitors;
  - create a severe danger of shifting of costs from competitive to monopoly services;
  - stifle or weaken competition in the competitive sectors, with a consequent injury to the consuming public;
  - discourage competition also at the putatively monopolistic, local exchange level; and —since they are under no apparent compulsion of logical consistency—
  - not have any significant beneficial competitive effect in the interLATA market.
- 37. These many arguments betray not only severe internal inconsistencies but also an almost complete blindness to regulatory history and practice and to elementary principles of competition.